

leg, a transverse leg, a keyhole (231), two keys (232), a mounting hole (233), a rotating element (234) and two optional fastening holes (235). The keyhole (231) is formed in the longitudinal leg and has an inner edge. The keys (232) are formed diametrically opposite to each other on the inner edge of the keyhole (231). The mounting hole (233) is formed in the transverse leg. The rotating element (234) is mounted in the mounting hole (233) and is mounted rotatably in the base (60). The fastening holes (235) are formed in the longitudinal leg so the fastening elements (41) can pass through the fastening holes (235, 244) and attach the offset hinge bracket (23) to the pivot pin bracket (24).

[0035] The rotating positioning element (25) is mounted rotatably around the combination shaft (213), abuts the transverse leg of the pivot pin bracket (24) and has an outer edge, an outside surface, an inside surface, a central circular hole (251), two optional mounting tabs (252) and two protrusions (253). The outside surface abuts the transverse leg of the pivot pin bracket (24). The mounting tabs (252) are formed on the outer edge of the rotating positioning element (25) of the offset hinge (20) and correspond to and are mounted respectively in the notches (242). The protrusions (253) are symmetrical, are formed concentrically and diametrically opposite to each other on the inside surface around the central circular hole (251) and have inclined ends.

[0036] The stationary positioning element (26) is mounted on the combination shaft (213), abuts the inside surface of the rotating positioning element (25) and has an inside surface, an outside surface, a central keyhole (261) and two detents (262). The detents (262) are formed on the inside surface of the stationary positioning element (26) and correspond to the protrusions (253) on the rotating positioning element (25).

[0037] The biasing assembly (27) is mounted rotatably around the combination shaft (213), abuts the outside surface of the stationary positioning element (26) and has a central hole (271).

[0038] The washer (28) is mounted around the combination shaft (213), abuts the biasing assembly (27) and has a central hole (281).

[0039] The fastener (29) is attached to the combination shaft (213), sequentially holds the washer (28), the biasing assembly (27), the stationary positioning element (26), the rotating positioning element (25), the pivot pin bracket (24) and the limit disk (22) on the combination shaft (213).

[0040] The turning hinge (30) is mounted in the tilt hinge bracket (13) and the offset hinge bracket (23), is used to turn the cover (50) from side to side and comprises a rotating positioning element (34), a stationary positioning element (33), a biasing member (32) and a keyed pivot pin (31).

[0041] The rotating positioning element (34) is attached to the outside surface of the tilt hinge bracket (13) and the longitudinal leg of the offset hinge bracket (23) and has an outer edge, a central hole (341), a first protruding limit (342) and a second protruding limit (343). The first and second protruding limits (342, 343) are formed on the outer edge of the rotating positioning element (34) of the turning hinge (30) and pass respectively through the keyholes (132) in the tilt hinge bracket (13).

[0042] The stationary positioning element (33) is attached to the inside surface of the tilt hinge bracket (13) and has an outer edge, an outside surface, an inside surface, a central keyed hole (331), a positive stop (332) and a retainer (333). The inside surface of the stationary element (33) of the turning hinge (30) abuts the inside surface of the tilt hinge bracket (13) of the tilt hinge (10). The positive stop (332) is formed on the outer edge of the stationary positioning element (33) and selectively abuts the first and second protruding limits (342, 343) on the rotating positioning element (34) of the turning hinge (30). The retainer (333) is formed on the inside surface at the outer edge of the stationary positioning element (33) of the turning hinge (30) and selectively engages in the first and second detents (132, 133).

[0043] The biasing member (32) presses against the outside surface of the stationary positioning element (33) and has a central hole (321).

[0044] The keyed pivot pin (31) passes sequentially through the biasing member (32), the stationary positioning element (33), the through hole (131) in the tilt hinge bracket (13), the rotating positioning element (34) and the keyhole (231) in the offset hinge bracket (23) and has a distal end, a proximal end, a flange (312) and two notches (311). The flange (312) is formed around the distal end of the keyed pivot pin (31) and holds the biasing member (32) securely against the stationary positioning element (33). The notches (311) are formed diametrically opposite to each other in the proximal end of the keyed pivot pin (31) and are attached to the keys (232) in the keyhole (231) in the offset hinge bracket (23).

[0045] With further reference to FIG. 7, the cover (50) is opened by pivoting the tilt hinge (10). Because the limit disk (12) of the tilt hinge (10) and the stationary positioning element (16) of the tilt hinge (10) are keyed on the keyed pivot pin (11) of the tilt hinge (10), the keyed pivot pin (11) will rotate the limit disk (12) and the stationary positioning element (16). When the cover (50) is pivoted to a predetermined visual angle, the first and second protrusions (153, 154) on the rotating positioning element (15) of the tilt hinge (10) are held respectively in the third and fourth detents (164, 165) of the stationary positioning element (16). The engagement of the protrusions (153, 154) of the rotating positioning element (15) and the detents (164, 165) of the stationary positioning element (16) keeps the cover (50) opened to the predetermined visual angle.

[0046] When the cover (50) is closed by rotating the keyed pivot pin (11) of tilt hinge (10), the first and second protrusions (153, 154) on the rotating positioning element (15) engage and are held respectively in the first and second detents (162, 163) in the stationary positioning element (16). The engagement of the protrusions (153, 154) on the rotating positioning element (15) and the detents (162, 163) in the stationary positioning element (16) keeps the cover (50) from hitting the base (60).

[0047] With further reference to FIG. 8, the cover (50) is pivoted beyond the angle where the positive stop (122) on the limit disk (12) of the tilt hinge (10) engages the positive stop (141) on the pivot pin bracket (14). This forces the protrusions (253) on the rotating positioning element (25) of the offset hinge (20) to disengage from the detents (262) on the stationary positioning element (26). The cover (50) and